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News Summary

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Government aid to students who are planning religious careers does not necessarily violate the constitutional separation of church and state, the Supreme Court has ruled. Story on Page 12.

Education Secretary William J. Bennett favors federal consumer-protection legislation to cover college students. Story on Page 12.

State loan-guarantee agencies are making little progress in apprehending students who are involved in loan fraud. Story on Page 13.

States will award $1.29 billion in grants and scholarships to needy undergraduates this year, a new survey indicates. Story on Page 13.

Falling oil prices mean less money for colleges in some states. Story on Page 21.

Editorial consultants give young scholars advice on how to turn a dissertation into a publishable work. Story on Page 23.

Colleges are seeking alternative arrangements for liability insurance as the industry increases premiums and cuts coverage. Story on Page 26.

The resignation of the University of Minnesota's basketball coach after the arrest of three players for sexual assault raises questions about who is responsible for team members' actions. Stories on Page 33.

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Most Students Are Satisfied with Their Education, Survey Indicates, but Frustrations Are Widespread

By ROBERT L. JACOBSON

Nearly four-fifths of American undergraduates, surveyed in the spring of 1984, said they were satisfied with their education. But along with that apparent vote of confidence were frustrations and disappointments that, for millions of students, constituted a largely negative evaluation of the college-going experience.

Among the indicators:

► If they could choose between taking a job right away and taking the same job after finishing their studies, about 41 per cent of the students said they would drop out at once to take the job.

► Almost 37 per cent said they were bored in class.

► About 40 per cent said no professors at their institutions took a "special personal interest" in their academic progress. Barely one-third of the students said they knew professors to whom they could turn for personal advice.

► About 42 per cent said most students were treated like "numbers in a book," and fewer than one-third said their institutions provided adequate advice on vocational issues, financial aid, or personal matters. Even on academic matters, only about 18 per cent rated their institutions' advising programs "highly adequate," compared with nearly 60 per cent who rated them merely "adequate" or worse.

Selected findings from the Carnegie Foundation survey of students appear in tables beginning on Page 27.

► While three-fourths of the students acknowledged that general education added to their understanding of other courses and helped prepare them for "lifelong learning," nearly 40 per cent considered general studies irrelevant to the subjects in which they were most interested. Close to that proportion complained that general-education courses were rarely taught by the best faculty members, and nearly one-third said such courses did not help prepare people for jobs.

Those findings have been drawn from thousands of previously unpublished statistics amassed by the Carnegie Foundation for the Advancement of Teaching in copyrighted reports of the survey. The participants were 5,000 undergraduates at a representative sample

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Expected Cuts in U.S. Funds Will Limit State College-Aid Budgets, Officials Say

By SCOTT JASCHIK

"It's like trying to find your way before they invented the compass."

That's how Dorothy S. McDiarmid, chairman of the Virginia House Appropriations Committee, summed up the plight that state legislators face this year as a result of the federal Gramm-Rudman-Hollings deficit-reduction act.

Ms. McDiarmid and other state political leaders said the law, which requires automatic cuts in federal spending to reduce the national budget deficit, will probably limit or prevent increases in state appropriations for higher education in the next few years.

Higher education is but one of many areas facing major cuts at the federal level, and state legislators will be hard pressed to make up for many of those cuts, the state leaders said.

In tight budget years, many state legislators tend to place elementary and secondary education before higher education in their priorities.

State officials stressed last week that they still did not know how much their governments would lose directly under the deficit-reduction act this year or next—and they were unsure how governors and legislators would respond.

But Federal Funds Information for

Continued on Page 20, Column 1

Probe of Shuttle Disaster Stalls Space Research

The investigation into last week's explosion of the space shuttle is likely to delay future flights and force scientists to scrap or postpone research projects. See story on Page 4.

Health-Care Shifts Said to Curb Need for New Physicians

BALTIMORE

Health-maintenance organizations and new health-care programs will substantially reduce the number of physicians needed in the United States by the end of the decade, according to researchers at the Johns Hopkins University school of public health.

In a study published in the *New England Journal of Medicine*, the scientists said projections made in 1980 by a national advisory panel had overestimated the country's need for physicians by as much as 50 per cent.

The scientists said the Graduate Medical Education National Advisory Council had assumed most physicians would continue practicing in conventional fee-for-service settings, such as private offices and hospi-

Continued on Page 26, Column 1

2 Scholars' Conflict in Sears Sex-Bias Case Sets Off War in Women's History

By KAREN J. WINKLER

Conflicting testimony by two scholars in a pending sex-discrimination case brought by the Equal Employment Opportunity Commission against Sears, Roebuck & Company is causing a storm of controversy in the discipline of women's history.

The case pitted Rosalind Rosenberg, a Barnard College historian who served as an expert witness for Sears, against Alice Kessler-Harris, a historian at Hofstra University who served as an expert witness for the E.E.O.C. On the stand last year, the two highly respected scholars differed sharply on the historical roots of sex discrimination in the work force.

Why have their few hours of testimony in a 10-month trial sparked articles in the popular, scholarly, and feminist presses; been the subject of a Columbia University conference on the subject of women and society; and led to resolutions by women's-history groups and to letters and petitions circulated to the historical profession at large?

Investigation Began in 1973

For many scholars, the testimony raises questions not just about the merits of the sex-discrimination case against Sears, but also about the merits of the scholarly debate on culture and sex differences, the validity of statistical evidence, the relationship between scholarship and politics, and the suitability of scholars as expert witnesses.

In 1973, the E.E.O.C. began to investigate Sears on charges of discriminating against women and members of minority groups. In 1979, the commission filed suit in federal court in Chicago, charging the company with a "pattern or practice" of sex discrimination. When the case came to trial in 1984, the E.E.O.C. made two allegations: that Sears had discriminated against women in hiring for the higher-paying commission-sales jobs, and that it had paid women

Continued on Page 8, Column 1

PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY

A Pennsylvania State Police expert examines a questionable student-loan application.

State Loan Agencies Search for Ways to Halt Fraud; Pa. Plan Is Praised

Pennsylvania plan

State loan agencies

By ROBIN WILSON

SAN DIEGO

Only one state student-loan-guarantee agency—the Pennsylvania Higher Education Assistance Agency—has a sophisticated fraud- and abuse-detection unit, agreed loan officials at a conference here.

In the eight years since the unit was established, its chief, I. E. Beard, has received hundreds of telephone calls from other agencies seeking information about its operations.

Seven special investigators employed by the agency gather dozens of tips each week on possible loan abuse from students, neighbors, landlords, and campus administrators. The investigators pursue each tip, tracking down borrowers and checking the records of colleges and banks to try to verify the accusations, Mr. Beard said.

The investigators are authorized by state law to carry guns, make arrests, and seek warrants to search suspects' property.

Seven other employees audit student-loan records at colleges and lending institutions to insure that each loan was properly certified by college officials and that the funds went to eligible students.

Mr. Beard says his investigators and auditors look for the following types of loan abuse:

Misuse. Any student who does not use loan money for educational bills or necessary living expenses such as room and board or school supplies is misusing it, Mr. Beard said. In most cases of misuse, he said, students apply for a loan intending to use it for college but then drop out and use the money to help buy a car or other personal property.

Forgery. Borrowers who apply for a student loan with no intention of attending classes frequently forge the signatures of student-aid officials to certify their loan applications to lenders. They must commit forgery a second time if, as required in Pennsylvania, loan checks are made payable jointly to the student and the college.

Fraudulent applications. People involved in loan fraud usually submit several applications, using the names and address-

Continued on Page 16, Column 1

SAN DIEGO

Officials of the California Student Aid Commission received an unexpected tip last year that helped them uncover a $150,000 loan-fraud scheme.

While moving a graduate student's belongings out of a dormitory, campus security officers at the University of California at Santa Cruz had run across a box containing dozens of applications for student loans at colleges across the country.

The security officers remembered the box during a briefing with officials of the commission, who were visiting California campuses to tell administrators how they could help track down people who had received student loans fraudulently.

Upon investigating, the commission people learned that the student had been traveling across the country in a new Mercedes-Benz, picking up his loan checks, and never attending classes.

Dean Taylor, the supervisor of the California commission's two-year-old loan-fraud unit, said his staff would probably never have discovered the scheme if the campus officials hadn't mentioned it.

Lack of Data Base Is Bemoaned

Several other state officials at a conference here on curbing abuse of student loans told similar stories of stumbling onto loan-fraud schemes. Their accounts dramatized complaints by officials of state loan-guarantee agencies about the lack of a national data base that they could use to exchange information and determine whether a student had illegally received multiple loans.

The federal government guarantees student loans, and state agencies reinsure them for lenders in their states. The agencies are responsible for tracking down defaulters.

State officials acknowledged that often the guarantee agencies themselves had not vigorously tried to prevent fraud in the program.

Only about a dozen state agencies, they said, employ people whose primary job is

Continued on Page 16, Column 1

Calls on Accreditors to Do More

role for the federal government, noting that it is prohibited by law from prescribing the kinds of courses offered by colleges that receive federal money.

Because state governments are responsible for licensing and recognizing individual colleges, Mr. Bennett said the states should also take an active role in improving the accountability of colleges and universities.

For instance, he said, state governments should take into account the quality of an institution when deciding how much financial support it deserves. He praised Tennessee for incorporating measurements of students' performance at particular colleges into the process used to allocate state aid to institutions of higher education.

In addition, Mr. Bennett said, more state higher-education agencies should administer tests to students throughout their college careers to determine the "value added" to their intellectual abilities by their studies.

Mr. Bennett recommended several other ways to assure high quality in college programs:

► Postsecondary institutions should take more care to admit only students who are equipped to benefit from higher education. He said the Education Department had found instances in which college-admissions tests for students who did not have a high-school diploma were "geared to the third- and fourth-grade level."

"Institutions are defrauding students," said Mr. Bennett, "and in many cases they are ripping off the American public when they admit individuals who are manifestly unprepared for the work that will be required of them."

► Colleges "must do a more conscientious job of stating their goals, of gauging their own success in relation to those goals, and of making their results available to everyone—students, prospective students, parents, citizens, and taxpayers."

Because there are "individual institutional goals that vary enormously from school to school," Mr. Bennett said, "it is only sensible that each school appraise its own progress toward those goals."

First in Series of Hearings

Last week's session was the first in a series of hearings the Senate subcommittee plans to hold on the federal government's role in assessing and improving postsecondary education.

Sen. Robert T. Stafford, Republican of Vermont and chairman of the subcommittee, said that since federal student-aid programs had increased the ability of students to obtain higher education, "we must insure that the postsecondary education they receive is of the highest caliber possible."

"As the anecdotal evidence continues to mount that many students are taken advantage of by shoddy institutions with no real

Continued on Page 22, Column 1

State Funds for Needy Undergraduates to Rise 12 Pct. This Year, Survey Finds

WASHINGTON

State spending on grants and scholarships for needy undergraduates is expected to rise nearly 12 per cent this year, the largest rate of increase in nine years.

States expect to award $1.29-billion to 1.3 million needy undergraduates in academic 1985-86, $138-million more than in 1984-85, a survey by the National Association of State Scholarship and Grant Programs has found. Last year, such spending grew 11.4 per cent.

No Increase in 14 States

Most of this year's growth is expected to be concentrated in fewer than half the states. Fewer states plan to increase their spending this year than did so last year, the survey found.

Only 22 states expect their aid dollars to grow by 10 per cent or more this year, the report says, and 14 expect no increase at all. Only three states did not increase aid last year.

Increases in aid have not kept up with rising college costs in more than half of the states. According to a report of the association's survey, costs at public and private colleges have increased by about 70 per cent since academic 1979-80. Grant money has kept pace in only 15 states, the survey found.

"We have been looking for evidence of states' acting to really increase aid as a response to cutbacks in aid by President Reagan, but you can't find that," said Jerry S. Davis, director of research and policy analysis for the Pennsylvania Higher Education Assistance Agency, which prepared the report.

Undergraduate recipients of aid based on financial need are expected to get an average of $969 each this year, a 10-per-

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State Funds for Needy Students Seen Rising 12 Pct. This Year

Continued from Page 13

cent increase over last year's average of $881.

The report said 57.1 per cent of the money would go to students attending private institutions in the state that awarded the aid. Another 41.3 per cent is expected to go to students at in-state public colleges, and the remainder to students attending out-of-state colleges.

According to the report, the states' assistance to needy graduate students this year is expected to increase 11.8 per cent, from $17.47-million to $19.54-million. But only 23 states have grant and scholarship programs for such students.

"It is quite clear that graduate and professional students' access to need-based aid is much more restricted than undergraduates' access," the report said.

It noted that 28 states have aid programs for undergraduates that are not based on financial need. Spending on those programs, which include merit scholarships and grants to encourage students to enter certain fields of study, is expected to increase by 7.3 per cent, to $127-million. About $11-million, or 24 per cent more than in academic 1984-85, is expected to be awarded to graduate students this year through similar programs.

The survey found several shifts in the characteristics of undergraduate student-aid recipients. Less aid is expected to go to black students than in the past few years, while more is expected to go to Asian-American students, the report found.

For example, black students' share of state scholarship money is expected to decrease from 23.9 per cent in 1981-82 to 14.9 per cent this year. Black students are likely to receive $53-million this year.

"This trend is a reflection of the dramatic and recent decrease in post-secondary-education participation rates of black high-school graduates throughout the nation," the report said.

By contrast, the proportion of state grant money going to Asian-American students is expected to increase from 3.2 per cent to 5.5 per cent.

In addition, part-time students, older students, and those attending proprietary institutions are receiving an increased share of state grant money, the survey found.

In academic 1981-82, states reported they had awarded $6.1-million to 13,000 part-time students. This year they estimate they will give $43.5-million to 55,000 part-time students, more than a sevenfold increase.

From 1981-82 to 1985-86, state aid to students at proprietary institutions more than doubled, from $54-million to $120-million, according to the estimates.

In academic 1981-82, 75 per cent of state-aid recipients were 18 to 21 years old, while this year 63.3 per cent are expected to be in that age group.

4 States Award 56 Pct.

According to the report, four states—California, Illinois, New York, and Pennsylvania—are expected to award about 56 per cent of the grant and scholarship money, $723-million, in the current year. Sixteen states will account for about 88 per cent of the funds awarded, the report estimated.

Eleven states expect to give less than $1-million each to students this year. They are Alaska, Delaware, Hawaii, Idaho, Maine, Montana, Nevada, New Hampshire, North Dakota, South Dakota, and Wyoming.

Only three states—Illinois, Rhode Island, and Vermont—have increased aid in each year since 1979-80, the study found.

Massachusetts, Minnesota, and Puerto Rico have more than doubled their spending on grants and scholarships between academic 1979-80 and 1985-86, the report said.

Some states plan to implement new programs this year or next. Many of the new programs will be aimed at encouraging students to choose certain careers.

For example, five states—Florida, Iowa, Kentucky, Missouri, and West Virginia—plan to establish programs that allow students to agree to work in a specified career in exchange for having repayment of their federal Guaranteed Student Loans forgiven or postponed.

According to the survey, such programs have become popular over the last few years as ways to encourage students to go into such fields as teaching mathematics and science in elementary and secondary schools.

The programs insure that a state will get a return on its investment in a student, says Mr. Davis. "This minimizes a state's risk," he says. "If a kid doesn't go into teaching, he has to pay the loan back."

Four states—Kansas, Kentucky, New Hampshire, and Tennessee—plan to start merit-scholarship programs. Four others—Michigan, New Jersey, Utah, and Virginia—said they would begin new work-study plans.

Wisconsin reported that it would establish a grant program for minority students enrolled in private institutions in the state, and Michigan plans to begin a grant program for non-traditional students. Rhode Island said it would begin a need-based grant program for prison inmates.

—ROBIN WILSON

Non-Resident Limit for Freshman Classes Proposed in N.C.

CHAPEL HILL, N.C.

The proportion of non-residents in freshman classes in the University of North Carolina system would be limited to 18 per cent at each campus, under a plan proposed by William C. Friday, the university's president.

Since 1947, a ceiling of 15 per cent has been officially in place, but since 1980, non-resident freshman enrollment has risen past the limit, reaching 19 per cent last fall.

"While we recognize the contribution of out-of-state undergraduates, we also understand that our institutions have a special obligation for the education of North Carolinians," Mr. Friday said.

A spokesman for Mr. Friday said the university would risk losing some support in the Legislature if non-resident enrollment continued to climb.

Mr. Friday's proposal has been approved by the Board of Governors Committee on Educational Planning, Policies, and Programs and is expected to receive final approval from the full board this month.

FACT-FILE

Estimated State Student Aid, 1985-86

Undergraduate

	Need-based assistance			Non-need-based assistance		
	Dollars paid out	Number of awards	Average award amount	Dollars paid out	Number of awards	Average award amount
Alabama	$ 2,242,000	2,480	$ 904	$ 4,319,000	8,166	$529
Alaska	241,000*	161*	1,497*	—	—	—
Arizona	2,578,000	3,639	708	—	—	—
Arkansas	4,412,000	11,791	374	392,000	196	2,000
California	119,859,000	66,268	1,809	—	—	—
Colorado	9,304,000	12,300	756	7,304,000	10,053	727
Connecticut	11,198,000	11,890	942	—	—	—
Delaware	714,000	1,190	600	202,000	201	1,005
D.C.	1,106,000	885	1,250	—	—	—
Florida	14,799,000	22,019	672	16,573,000	17,682	937
Georgia	4,443,000	14,333	310	11,361,000	14,759	770
Hawaii	493,000*	1,400*	352*	—	—	—
Idaho	509,000	850	599	541,000	n/a	n/a
Illinois	123,202,000	98,164	1,255	3,750,000	1,572*	795*
Indiana	34,661,000	40,566	854	404,000	808	500
Iowa	22,533,000	15,228	1,480	983,000	6,091	161
Kansas	5,342,000	6,050	883	—	—	—
Kentucky	9,081,000	17,550	517	—	—	—
Louisiana	1,522,000	2,404	633	1,207,000	8,051	150
Maine	809,000	1,925	420	375,000	262	1,431
Maryland	7,361,000*	14,066*	523*	1,425,000*	1,722*	828*
Massachusetts	43,642,000	47,277	923	1,931,000	1,832	1,054
Michigan	59,430,000	34,092	1,743	3,957,000	16,100	246
Minnesota	52,800,000	56,000	943	—	—	—
Mississippi	1,286,000	1,950	659	945,000	193*	3,342*
Missouri	9,645,000	8,300	1,162	—	—	—
Montana	393,000	800	491	—	—	—
Nebraska	1,089,000*	1,850*	589*	—	—	—
Nevada**	414,000*	828*	500*	—	—	—
New Hampshire	656,000	1,519	438	3,000	10	300
New Jersey	67,976,000	60,389	1,126	2,117,000	3,371	628
New Mexico	1,461,000*	1,700*	712*	—	—	—
New York	382,250,000	333,600	1,146	23,255,000	66,386	335
North Carolina	4,888,000	6,760	675	19,829,000	23,720	836
North Dakota	802,000	1,767	454	—	—	—
Ohio	47,210,000	90,000	525	12,221,000	18,329	667
Oklahoma	8,632,000	15,300	564	147,000	116	1,267
Oregon	9,344,000	17,262	541	—	—	—
Pennsylvania	98,069,000	119,480	821	766,000	342	2,240
Rhode Island	8,149,000	11,000	741	—	—	—
South Carolina	13,726,000*	7,412*	1,852*	—	—	—
South Dakota	641,000	2,207	290	35,000	35	1,000
Tennessee	2,082,000	19,621	616	203,000	168	1,208
Texas	22,430,000	23,121	970	—	—	—
Utah	1,632,000	5,000	326	590,000	365	1,616
Vermont	7,888,000	9,747	809	—	—	—
Virginia	4,420,000	6,500	680	12,166,000	11,834	1,028
Washington	9,764,000	13,004	751	28,000	166	1,474
West Virginia	5,227,000	6,500	804	—	—	—
Wisconsin	28,240,000	44,885	629	—	—	—
Wyoming	204,000*	279*	731*	—	—	—
Puerto Rico**	11,505,000*	49,200*	234*	—	—	—
Total	**$1,292,314,000**	**1,342,509**	**$969**	**$127,029,000**	**212,530**	**$ 598**

Graduate and Professional

	Need-based assistance			Non-need-based assistance		
	Dollars paid out	Number of awards	Average award amount	Dollars paid out	Number of awards	Average award amount
Alabama	$ 66,000	35	$ 1,886	$ 76,000	59	$ 1,288
Alaska	—	—	—	1,834,000*	n/a	n/a
Arizona	8,000	11	727	—	—	—
California	3,887,000	1,175	3,308	—	—	—
Colorado	806,000	700	1,151	1,047,000	700	1,496
Connecticut	—	—	—	100,000	10	10,000
Delaware	126,000	210	600	24,000	6	4,000
D.C.	n/a	n/a	n/a	—	—	—
Florida	2,000	1	2,000	528,000	649	814
Georgia	—	—	—	600,000	n/a	n/a
Indiana	—	—	—	250,000	335	746
Iowa	—	—	—	n/a	n/a	n/a
Louisiana	—	—	—	95,000	77	1,234
Maine	—	—	—	125,000	87	1,437
Maryland	399,000*	619*	645*	39,000*	22*	1,773*
Massachusetts	2,533,000	1,656	1,530	—	—	—
Michigan	2,160,000	1,143	1,890	—	—	—
Mississippi	—	—	—	325,000	138*	1,630*
Nevada	n/a	n/a	n/a	—	—	—
New Hampshire	3,000	6	500	620,000	n/a	n/a
New Jersey	630,000	210	3,000	400,000	66	6,061
New York	3,750,000	13,600	276	2,815,000	714	1,891*
North Carolina	1,164,000	554	2,101	—	—	—
Oklahoma	1,405,000	1,700	826	37,000	29	1,276
Oregon	63,000	31	2,032	—	—	—
South Dakota	n/a	n/a	n/a	—	—	—
Tennessee	—	—	—	39,000	34	1,147
Texas	1,788,000	1,511	1,183	—	—	—
Utah	—	—	—	891,000	74	12,041
Vermont	132,000	103	1,282	—	—	—
Virginia	—	—	—	1,175,000	1,161	1,012
Wyoming	36,000*	21*	1,714*	—	—	—
Puerto Rico	590,000*	2,800*	211*	—	—	—
Total	**$19,548,000**	**26,086**	**$749**	**$11,020,000**	**4,161**	**$2,648**

n/a not available
* Indicates 1984-85 data.
** Data could not be broken down into graduate versus undergraduate categories, and are included in undergraduate totals.
Note: This table shows most of the money that states spend on student aid. However, some states may spend more through programs that are not specifically identified as student-aid programs. Totals include 1984-85 appropriations where 1985-86 figures are not available.

SOURCE: NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS

U.S. Cuts Seen Limiting States' Aid to Colleges

Continued from Page 1

States, a research group operated by the National Governors' Association and the National Conference of State Legislatures, has projected that state and territorial governments would lose more than $3-billion in federal grants in the current fiscal year and $13.7-billion in fiscal 1987.

The figures for the current year proved to be too high. The study was based on an estimate that a 4.6-percent cut in spending on domestic programs would be necessary to meet the deficit-reduction schedule required by the act; the actual cut was 4.3 per cent.

The projected losses were generally larger in Western states, since a smaller-than-average proportion of those states' federal funds come from programs exempted from the required cuts.

The figures were based on an assumption that the deficit-reduction act would survive court challenges and continue to have political support. "The political will to produce these savings must be assumed," the report said. "That seems to be true for 1986; it is less likely that the federal government will accept the massive defense or domestic reductions necessary for 1987."

'Basically Political'

T. K. Wetherell, chairman of the Florida House Higher Education Committee, said that because of the Gramm-Rudman-Hollings act, public colleges and universities faced "a combination of smaller percentage increases in appropriations, certain programs disappearing, and tuition going up."

Legislators will make "basically political decisions" about which programs to cut, he said. "He who has the most clout will probably survive."

Mr. Wetherell said "glitter-type programs," such as support for the arts, and those "that cater to a more narrowly defined constituency," such as women's centers, would probably be cut first. "It's just a balancing act, and it's going to get harder and harder," he added.

Carla Edlefson, education adviser to Ohio's Democratic Gov. Richard F. Celeste, said the next budget cycle would be "very tough" on higher education and all areas that depend on state financing.

In states where local governments have become dependent on federal Community Development Block Grants, there will be strong pressure on state leaders to replace lost federal funds, she said.

Ms. Edlefson said she feared the tight budgets would increase the competition among various educational groups. "You'll be stacking those who want more vocational education against those who want more for student aid," she said.

In Idaho, a state with a $27-million deficit in its current budget, legislators will be focusing on cutting state programs, not offsetting federal cuts, said Mark Falconer, the higher-education budget analyst for the lawmakers.

"With Gramm-Rudman, more and more college programs are going to be cut," he added. "It will be a very tight year."

North Carolina leaders are trying to set priorities for federal and state programs, so they can act more quickly to protect the most important ones when the severity of the federal cuts becomes clear.

Lee E. Monroe, senior education adviser to North Carolina's Republican Gov. James G. Martin, said he planned to meet with college leaders to try to determine which federal programs the state should try to maintain and which state programs could be cut to produce additional revenue.

"State leaders have to examine their priorities and more clearly look at those programs that have worked, and those they can do without," he said.

Mr. Monroe added that Governor Martin had said the public schools would take precedence over higher education, a view shared by leaders in other states.

Helen Sommers, chairman of the Washington House Higher Education Committee, said her state's constitution specifically stated that elementary and secondary education were the "paramount responsibility" of state government.

Because of that stipulation, higher education "is held back" during difficult economic times, and the deficit-reduction act "will make things even worse than before," Ms. Sommers said.

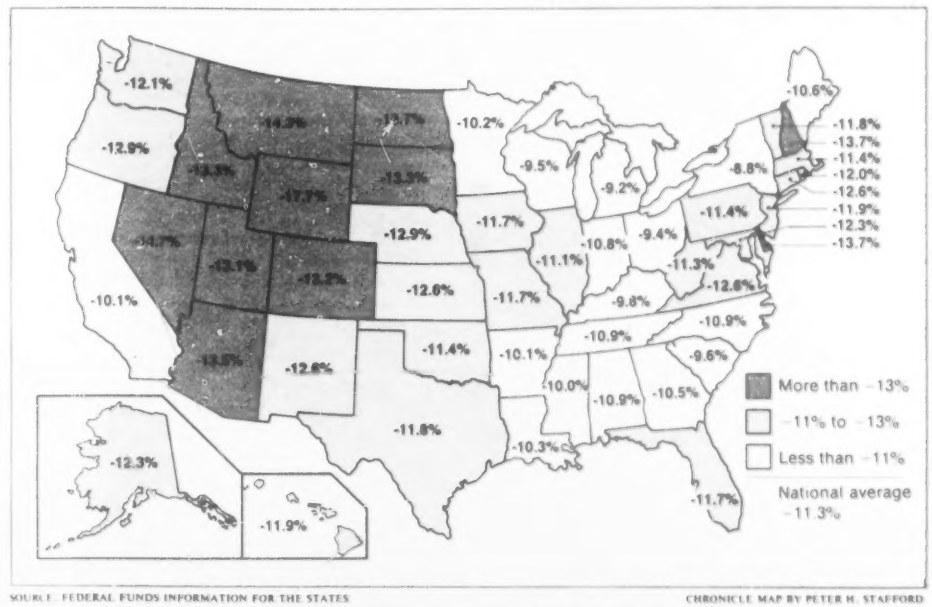
Florida's Mr. Wetherell said that even in states that do not have a constitutional provision giving elementary and secondary education priority over higher education, there is a tendency to do so.

"There is a perception that public-school education is an obligation of government. In some ways, higher education is seen as a frill," Mr. Wetherell said.

Minnesota higher-education officials are studying several of their state student-aid programs because they are based in part on students' Pell Grants, said Philip M. Lewenstein, director of legislation for the Minnesota Higher Education Coordinating Board.

Under state policy, if students' federal awards decreased, Minnesota would make up the difference. Mr. Lewenstein said state officials were unsure about their ability to do so. "We're going to have to make some very difficult choices."

What States Could Lose Under Deficit-Cutting Law in 1987



SOURCE: FEDERAL FUNDS INFORMATION FOR THE STATES CHRONICLE MAP BY PETER H. STAFFORD

Map shows the estimated percentages of funds that states would lose in programs in which they receive money directly from the federal government.

Estimated Reductions

	Fiscal 1986		Fiscal 1987	
	Reduction	Pct. Change	Reduction	Pct. Change
Alabama	$51,174,000	-2.5%	$228,663,000	-10.9%
Alaska	23,460,000	-3.8%	105,991,000	-16.3%
Arizona	34,164,000	-3.1%	152,398,000	-13.5%
Arkansas	26,134,000	-2.3%	118,605,000	-10.1%
California	281,503,000	-2.3%	1,234,785,000	-10.1%
Colorado	38,895,000	-3.1%	175,139,000	-13.2%
Connecticut	47,073,000	-2.9%	217,907,000	-12.6%
Delaware	9,490,000	-3.0%	46,079,000	-13.7%
District of Columbia	42,911,000	-3.4%	195,272,000	-15.0%
Florida	103,767,000	-2.7%	476,963,000	-11.7%
Georgia	66,046,000	-2.4%	294,972,000	-10.5%
Hawaii	15,938,000	-2.6%	75,765,000	-11.9%
Idaho	13,338,000	-3.0%	61,664,000	-13.3%
Illinois	139,637,000	-2.6%	627,851,000	-11.1%
Indiana	53,646,000	-2.5%	247,838,000	-10.8%
Iowa	31,696,000	-2.7%	144,064,000	-11.7%
Kansas	23,542,000	-2.9%	107,745,000	-12.6%
Kentucky	47,474,000	-2.3%	211,745,000	-9.8%
Louisiana	61,506,000	-2.4%	280,058,000	-10.3%
Maine	15,538,000	-2.3%	83,006,000	-10.6%
Maryland	59,522,000	-2.8%	271,731,000	-12.3%
Massachusetts	85,493,000	-2.7%	383,998,000	-11.4%
Michigan	102,531,000	-2.1%	454,155,000	-9.2%
Minnesota	49,954,000	-2.4%	222,589,000	-10.2%
Mississippi	35,547,000	-2.3%	157,684,000	-10.0%
Missouri	54,480,000	-2.7%	251,430,000	-11.7%
Montana	16,787,000	-3.3%	77,378,000	-14.3%
Nebraska	18,758,000	-3.0%	83,742,000	-12.9%
Nevada	11,226,000	-3.3%	53,244,000	-14.7%
New Hampshire	11,970,000	-3.0%	60,165,000	-13.7%
New Jersey	97,340,000	-2.7%	451,027,000	-11.9%
New Mexico	25,657,000	-2.9%	115,032,000	-12.6%
New York	278,349,000	-2.1%	1,257,062,000	-8.8%
North Carolina	62,971,000	-2.6%	278,118,000	-10.9%
North Dakota	11,922,000	-3.1%	56,016,000	-13.7%
Ohio	115,659,000	-2.2%	529,101,000	-9.4%
Oklahoma	37,899,000	-2.7%	168,700,000	-11.4%
Oregon	37,374,000	-2.9%	178,487,000	-12.9%
Pennsylvania	152,379,000	-2.6%	685,734,000	-11.4%
Rhode Island	17,883,000	-2.7%	84,614,000	-12.0%
South Carolina	34,812,000	-2.3%	155,225,000	-9.6%
South Dakota	12,347,000	-3.0%	57,895,000	-13.3%
Tennessee	58,353,000	-2.6%	261,799,000	-10.9%
Texas	157,848,000	-2.7%	722,226,000	-11.8%
Utah	22,736,000	-3.1%	99,532,000	-13.1%
Vermont	8,706,000	-2.6%	41,398,000	-11.8%
Virginia	62,203,000	-2.9%	281,949,000	-12.6%
Washington	53,420,000	-2.8%	244,144,000	-12.1%
West Virginia	26,134,000	-2.6%	117,309,000	-11.3%
Wisconsin	50,348,000	-2.2%	224,067,000	-9.5%
Wyoming	19,854,000	-4.1%	91,536,000	-17.7%
Puerto Rico	88,457,000	-3.9%	404,919,000	-17.0%
Trust Territories	16,453,000	-3.6%	78,872,000	-15.9%
Total	**$3,022,303,000**	**-2.6%**	**$13,687,407,000**	**-11.0%**

Notes: Figures are based on programs in which money is transferred from the federal government to the states, including Community Development Block Grants, Compensatory Education for the Disadvantaged, Education of the Handicapped, general revenue sharing, Head Start, highway funds, the Job Training Partnership Act, and vocational and adult education. Figures for 1986 are based on a 4.6-per-cent reduction in federal domestic spending; the actual reduction will be 4.3 per cent.

SOURCE: FEDERAL FUNDS INFORMATION FOR STATES

Congressional Hearings

WASHINGTON

The following Congressional hearings of interest to educators and scientists are scheduled for the coming weeks. Since changes frequently occur with little advance notice, it is advisable to check with committees on or near the hearing dates.

SENATE

Taxes. February 4-6. Hearings on tax reform. Contact: Senate Committee on Finance; (202) 224-4515.

Handicapped. February 4 and 21. Hearings on proposed legislation authorizing funds for education of the handicapped. Contact: Senate Subcommittee on the Handicapped; (202) 224-6265.

Vocational education. February 19 and 25. Hearing on a bill to establish an Education and Training Partnership to administer the Carl D. Perkins Vocational Education Act and the Job Training Partnership Act. Contact: Senate Subcommittee on Employment and Productivity; (202) 224-6306.

Health research. February 20. Hearing on proposed legislation to extend programs of the National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism. Contact: Senate Subcommittee on Children, Family, Drugs, and Alcoholism; (202) 224-5630.

Science appropriations. February 25. Hearing on the fiscal 1987 budget request for the White House Office of Science and Technology Policy. Contact: Senate Subcommittee on Appropriations for Housing and Urban Development and Independent Agencies; (202) 224-7253.

Health research and training. March 4-5. Hearings on the fiscal 1987 budget request for the Department of Health and Human Services. Contact: Senate Subcommittee on Appropriations for Labor, Health and Human Services, Education and Related Agencies; (202) 224-7216.

National Science Foundation. March 5. Hearing on the fiscal 1987 budget request for the National Science Foundation. Contact: Senate Subcommittee on Appropriations for Housing and Urban Development and Independent Agencies; (202) 224-7253.

Health research. March 13. Hearing on the fiscal 1987 budget requests for the Centers for Disease Control and the Alcohol, Drug Abuse and Mental Health Administration. Contact: Senate Subcommittee on Appropriations for Labor, Health and Human Services, Education, and Related Agencies; (202) 224-7216.

HOUSE

Science policy. February 5. Hearing on the activities of the White House Office of Science and Technology Policy. Contact: House Committee on Science and Technology; (202) 225-6371.

New Bills in Congress

WASHINGTON

Following is a summary of bills of interest to higher education introduced recently in Congress. Copies of bills may be obtained from Representatives (Washington 20515).

SENATE

S 1932—Teachers' fellowships. To amend the internal Revenue Code of 1954 to impose an excise tax on television sets, the revenue from which would be deposited in a National Competitiveness Education Trust Fund for scholarships and summer fellowships for mathematics and science teachers. By Senator Baucus (D-Mont.).

S 2024—Education savings. To amend the Internal Revenue Code of 1954 to provide for the establishment of, and the deduction of contributions to, education savings accounts. By Senator Mathias (R-Md.).

S J Res. 251—Science. To designate the week of May 11-17, 1986, as "National Science Week, 1986." By Senator Hatch (R-Utah).

HOUSE OF REPRESENTATIVES

HR 4012—Budget. To repeal the Balanced Budget and Emergency Deficit Control Act of 1985. By Representatives Biaggi (D-New York) and Traficant (D-Ohio).

HR 4021—Handicapped. A bill to extend and improve the Rehabilitation Act of 1973. By Representative Williams (D-Mont.) and three others.

FACT–FILE

College Students: Who They Are, What They Think

A national profile of undergraduates, based on data from a 1984 Carnegie Foundation survey

Characteristics

Age as of Dec. 31, 1984	
16-17	0.1%
18	1.2%
19	12.2%
20	15.3%
21-24	39.6%
25-29	12.3%
30-39	13.9%
40 or older	7.5%
Sex:	
Male	40.0%
Female	60.0%
Race or ethnic group:	
White	80.7%
Black	5.0%
American Indian	0.7%
Mexican-American Puerto Rican, Hispanic	9.2%
Oriental, other Asian-American	3.5%
Other	0.8%
Year in college:	
Freshman	25.0%
Sophomore	29.8%
Junior	22.6%
Senior	22.6%
Undergraduate enrollment status:	
Full-time for credit	67.3%
Part-time for credit	25.9%
Enrolled, but not for credit	1.4%
Not enrolled *	5.5%
Citizenship, voting:	
U.S. citizen	94.0%
Planning to vote in next Presidential election	89.6%
Usually vote in student elections	38.6%
Veteran	4.7%
Marital status:	
Single	65.5%
Engaged	6.2%
Married	24.6%
Separated, divorced, widowed	3.8%
Number of dependent children:	
Under 6-years old	
None	88.8%
One	7.3%
Two or more	3.9%
6-years old and older:	
None	87.0%
One	5.3%
Two or more	7.7%
If no children, number expect to have:	
None	12.6%
One	2.6%
Two	49.1%
Three or more	35.2%
Religion in which raised:	
Baptist	6.6%
Southern Baptist	5.5%
Congregational (UCC)	2.0%
Episcopal	4.0%
Jewish	2.8%
Latter Day Saints (Mormon)	1.7%
Lutheran	5.5%
Lutheran (Missouri Synod)	1.7%
Methodist	9.1%
Presbyterian	6.0%
Quaker (Society of Friends)	0.1%
Roman Catholic	38.9%
Unitarian-Universalist	1.1%
Other Protestant	4.9%
Other	4.4%
None	5.8%
Present religion:	
Baptist	5.6%
Southern Baptist	4.9%
Congregational (UCC)	1.6%
Episcopal	3.3%
Jewish	2.8%
Latter Day Saints (Mormon)	1.6%
Lutheran	4.1%
Lutheran (Missouri Synod)	2.1%
Methodist	7.8%
Presbyterian	4.8%
Quaker (Society of Friends)	0.1%
Roman Catholic	34.8%
Unitarian-Universalist	1.7%
Other Protestant	5.5%
Other	6.7%
None	12.7%
Depth of religious conviction:	
Moderate or deep	77.6%
Largely indifferent	19.4%
Opposed to religion	3.0%
Number of current courses:	
One	15.1%
Two	11.0%
Three	12.8%
Four	24.3%
Five	23.7%
Six or more	13.1%
Since entering college, I stopped out or dropped out for at least a term (disregarding summers)	29.9%
Cumulative college grade average:	
A or A+	11.4%
A–	11.3%
B+	17.6%
B	20.3%
B–	14.2%
C+	14.5%
C	8.5%
C– or less	2.2%
Actual or probable major:	
Aeronautical, astronautical engineering	0.6%
Agriculture, forestry	1.5%
Anthropology, archeology	0.3%
Architecture, design	1.8%
Art	2.0%
Bacteriology, molecular biology, virology, microbiology	0.5%
Biochemistry	0.3%
Biological sciences (misc.)	0.2%
Biology	2.9%
Botany	0.1%
Business, commerce, management	15.1%
Chemical engineering	0.5%
Chemistry	0.8%
Civil engineering	2.0%
Dentistry	0.4%
Dramatics, speech	0.7%
Earth sciences, geology	1.2%
Economics	1.8%
Education (misc.)	1.4%
Educational administration	0.1%
Educational psychology, counseling	0.8%
Electrical engineering	3.4%
Elementary, secondary education	6.5%
Engineering (misc.)	2.5%
English	2.7%
Ethnic studies	—
Fine arts (misc.)	1.6%
Foreign language	1.4%
Foundations (education)	—
Geography	0.2%
Health fields (misc.)	4.7%
History	2.5%
Home economics	0.4%
Humanities (misc.)	0.6%
Journalism	1.6%
Law	2.1%
Library science	—
Mathematics, statistics	2.7%
Mechanical engineering	2.7%
Medicine	0.7%
Music	1.1%
Nursing	5.5%
Philosophy	0.5%
Physical and health education	0.9%
Physical sciences (misc.)	0.3%
Physics	0.5%
Physiology, anatomy	0.3%
Political science, government	2.8%
Psychology	2.6%
Religion, theology	0.3%
Social sciences (misc.)	0.8%
Social work, social welfare	1.6%
Sociology	0.9%
Women's studies	—
Zoology	0.3%
All other fields	10.1%
None	13.2%
Almost certainly or probably will go on to graduate or professional school	48.3%
Probable graduate field:	
Aeronautical, astronautical engineering	0.3%
Agriculture, forestry	0.7%
Anthropology, archeology	0.2%
Architecture, design	1.2%
Art	0.5%
Bacteriology, molecular biology, virology, microbiology	0.4%
Biochemistry	0.1%
Biological sciences (misc.)	0.2%
Biology	0.2%
Botany	—
Business, commerce, management	7.0%
Chemical engineering	0.2%
Chemistry	0.2%
Civil engineering	0.9%
Dentistry	0.3%
Dramatics, speech	0.3%
Earth sciences, geology	0.7%
Economics	1.0%
Education (misc.)	1.3%
Educational administration	0.3%
Educational psychology, counseling	1.1%
Electrical engineering	1.0%
Elementary, secondary education	1.5%
Engineering (misc.)	1.0%
English	0.7%
Ethnic studies	—
Fine arts (misc.)	0.4%
Foreign language	0.7%
Foundations (education)	—
Geography	—
Health fields (misc.)	2.3%
History	0.4%
Home economics	0.1%
Humanities (misc.)	—
Journalism	0.4%
Law	3.5%
Library science	0.2%
Mathematics, statistics	0.7%
Mechanical engineering	1.1%
Medicine	2.6%
Music	0.5%
Nursing	2.6%
Philosophy	0.1%
Physical and health education	0.7%
Physical sciences (misc.)	0.1%
Physics	0.1%
Physiology, anatomy	0.1%
Political science, government	1.1%
Psychology	1.2%
Religion, theology	0.4%
Social sciences (misc.)	0.2%
Social work, social welfare	0.7%
Sociology	0.5%
Women's studies	—
Zoology	0.3%
All other fields	4.9%
None	52.6%
Intend to obtain a teaching credential	19.0%
Time of college entrance after high school:	
Within 1 year	81.1%
Within 2 years	3.3%
Within 4 years	4.4%
5 or more years later	11.2%
All or most courses taken have had:	
Classes with more than 100 students	5.1%
Classes with fewer than 15 students	6.2%
Independent study	7.6%
Credit by examination	6.9%
Interdisciplinary study	7.1%
Learning contracts	7.5%
Team teaching	3.2%
Have used the following in courses:	
Prerecorded lectures or demonstrations on TV	39.4%
Live lectures on TV	11.4%
Self-paced instruction with programmed texts or study guides	39.2%
Self-paced instruction with programmed interactive computer	10.4%
Campus computer facility	39.6%
Audio-tutorial laboratory (other than language labs)	26.9%
Hours per week devoted to activities:	
Classes and seminars:	
None	2.3%
1-4	13.6%
5-10	24.9%
11 or more	59.4%
Studying in the library:	
None	32.3%
1-4	40.7%
5-10	16.5%
11 or more	10.4%
Organized student activities (other than athletics):	
None	63.6%
1-4	26.5%
5-10	7.8%
11 or more	2.1%
Intramural athletics:	
None	76.7%
1-4	18.2%
5-10	3.9%
11 or more	1.2%
Intercollegiate athletics:	
None	93.5%
1-4	1.8%
5-10	2.3%
11 or more	2.3%
Talking to faculty members:	
None	32.6%
1-4	60.8%
5-10	5.4%
11 or more	1.3%
Talking informally to students:	
None	7.4%
1-4	48.2%
5-10	23.3%
11 or more	21.2%
Campus cultural events:	
None	55.7%
1-4	38.2%
5-10	5.0%
11 or more	1.0%
Leisure reading:	
None	19.5%
1-4	51.7%
5-10	23.3%
11 or more	5.6%
Watching television:	
None	8.9%
1-4	41.7%
5-10	34.2%
11 or more	15.3%
Volunteer activities since entering college:	
Fund raising	40.2%
Hospital service	12.5%
Environment-related program	12.3%
Church-related program	36.4%
Election campaign	19.3%
Charity organizations	29.0%
Working with:	
The elderly	18.9%
The handicapped	15.9%
The mentally impaired	11.7%
Other service activity	40.8%
Planning to transfer from a community college to a four-year college	66.8%
Worried about job prospects after college	75.1%
Expected long-run career choice:	
Accountant	6.1%
Architect, city planner	1.4%
Armed forces	0.6%
Artist: painting, sculpture	0.2%
Business (misc.)	1.8%
Business/owner	4.3%
Buyer	1.0%
Clergy	0.4%
College teaching, research	2.1%
Commercial artist	1.4%
Computer programmer, analyst	5.1%
Designer, decorator	0.4%
Doctor, dentist, veterinarian	3.5%
Engineer	7.2%
Engineering, technical (misc.)	2.2%
Farmer	0.2%
Forester, conservationist	0.7%
Government administration	0.9%
Health professional (misc.), home economist, dietician	2.4%
Health technician, technologist, paramedic	1.0%
Homemaker (full-time)	0.3%
Lawyer	4.8%
Legal secretary	0.1%
Manager or administrator; banker	7.9%
Medical secretary	0.5%
Musician, theater arts	1.4%
Nurse	6.0%
Pharmacist, optometrist	0.5%
Protective services, law enforcement	1.3%
Psychologist, counselor	3.1%
Public relations, advertising	2.3%
Research (misc.), mathematician, statistician	0.8%
Sales worker	0.5%
Secretary, bookkeeper	1.8%
Semi-skilled, unskilled worker	—
Service worker (misc.)	0.3%
Skilled worker, craftsman	0.9%
Social worker	1.4%
Teaching: elementary	4.2%
Teaching: secondary	3.5%
Technician, technologist	1.6%
Therapist	2.0%
Writer, journalist	1.3%
Other occupations	3.5%
Undecided	6.6%
Preferred career choice:	
Accountant	3.7%
Architect, city planner	1.9%
Armed forces	0.3%
Artist: painting, sculpture	1.5%
Business (misc.)	1.3%
Business/owner	6.7%
Buyer	1.1%
Clergy	0.4%
College teaching, research	3.6%
Commercial artist	0.9%
Computer programmer, analyst	3.3%
Designer, decorator	2.4%
Doctor, dentist, veterinarian	7.0%
Engineer	4.2%
Engineering, technical (misc.)	1.5%
Farmer	0.6%
Forester, conservationist	1.1%
Government administration	1.2%
Health professional (misc.), home economist, dietician	1.2%
Health technician, technologist, paramedic	1.0%
Homemaker (full-time)	0.8%
Lawyer	5.0%
Legal secretary	0.2%
Manager or administrator; banker	3.7%
Medical secretary	0.2%
Musician, theater arts	4.7%
Nurse	2.1%
Pharmacist, optometrist	0.4%
Protective services, law enforcement	1.1%
Psychologist, counselor	2.8%
Public relations, advertising	2.1%
Research (misc.), mathematician, statistician	1.1%
Sales worker	0.3%
Secretary, bookkeeper	0.4%
Semi-skilled, unskilled worker	—
Service worker (misc.)	0.2%
Skilled worker, craftsman	1.3%
Social worker	1.2%
Teaching: elementary	2.1%
Teaching: secondary	1.3%
Technician, technologist	0.8%
Therapist	1.4%
Writer, journalist	4.5%
Other occupations	2.8%
Undecided	14.5%
Actions taken primarily because of the job market or the economy:	
Changed major	15.4%
Took second major or a minor	23.4%
Took work-related courses	26.1%
Decided to go to graduate or professional school	32.5%
Decided not to go to graduate school	9.0%
Considered quitting college	14.0%
Returned to school:	
For more training	30.3%
Because no suitable job	13.5%
Where lived most of the time in most recent college term:	
Dormitory or other college-run housing	21.7%
Fraternity or sorority house	2.3%
Rooming house, rented room	1.6%
Home of parents or relatives	30.5%
Apartment or house (not parents')	40.7%
Other	3.2%
Where would have preferred to live:	
Dormitory or other college-run housing	16.6%
Fraternity or sorority house	3.6%
Rooming house, rented room	2.7%
Home of parents or relatives	14.2%
Apartment or house (not parents')	56.9%
Other	5.9%
Earned pre-tax income in 1983 (including spouse's):	
None	—
Less than $3,000	40.7%
$3,000-$5,999	17.3%
$6,000-$9,999	9.0%
$10,000-$14,999	7.4%
$15,000-$19,999	4.8%
$20,000-$24,999	4.9%
$25,000-$29,999	3.3%
$30,000-$34,999	3.8%
$35,000-$39,999	2.3%
$40,000-$49,999	4.0%
$50,000 or more	2.4%
Parents' pre-tax income in 1983:	
None	0.8%
Less than $3,000	2.3%
$3,000-$5,999	2.9%
$6,000-$9,999	4.7%
$10,000-$14,999	10.6%

* Those not enrolled were asked to answer only those questions that they felt applied to them

— Indicates less than 0.1%

Continued on Following Page

FACT-FILE—Continued

Characteristics of Undergraduates in U.S. Colleges, 1984

Parents' pre-tax income in 1983: Continued	
$15,000-$19,999	8.0%
$20,000-$24,999	8.5%
$25,000-$29,999	9.8%
$30,000-$34,999	10.2%
$35,000-$39,999	8.7%
$40,000-$49,999	11.0%
$50,000 or more	20.3%
Employed now in a paid position:	
Full-time	23.5%
Part-time	38.8%
Hours worked per week:	
10 or less	16.2%
11-15	12.6%
16-20	14.5%
21-35	21.1%
36 or more	35.4%
Sources of education funds for the current year	
Aid from parents, family	
None	33.8%
$1-$499	16.8%
$500-$999	8.3%
$1,000-$1,999	11.6%
$2,000-$4,000	12.5%
Over $4,000	17.0%
Pell grants	
None	75.3%
$1-$499	8.3%
$500-$999	7.7%
$1,000-$1,999	7.6%
$2,000-$4,000	1.0%
Over $4,000	0.2%
Supplemental educational opportunity grants	
None	91.4%
$1-$499	4.6%
$500-$999	2.7%
$1,000-$1,999	1.1%
$2,000-$4,000	0.1%
Over $4,000	0.1%
State scholarship, grant	
None	84.4%
$1-$499	8.8%
$500-$999	4.0%
$1,000-$1,999	2.0%
$2,000-$4,000	0.5%
Over $4,000	0.3%
Local or private scholarship, grant	
None	87.1%
$1-$499	4.8%
$500-$999	3.2%
$1,000-$1,999	2.3%
$2,000-$4,000	1.8%
Over $4,000	0.7%
College work-study grant	
None	88.2%
$1-$499	3.8%
$500-$999	4.4%
$1,000-$1,999	2.5%
$2,000-$4,000	0.9%
Over $4,000	0.1%
Other employment	
None	44.0%
$1-$499	21.0%
$500-$999	9.2%
$1,000-$1,999	9.9%
$2,000-$4,000	8.1%
Over $4,000	7.8%
Federally guaranteed loan	
None	77.4%
$1-$499	2.2%
$500-$999	3.4%
$1,000-$1,999	5.3%
$2,000-$4,000	11.0%
Over $4,000	0.7%
National direct student loan	
None	91.6%
$1-$499	1.8%
$500-$999	2.4%
$1,000-$1,999	2.9%
$2,000-$4,000	1.3%
Over $4,000	0.1%
State "stand alone" loan	
None	98.8%
$1-$499	0.2%
$500-$999	—
$1,000-$1,999	0.1%
$2,000-$4,000	0.7%
Over $4,000	0.2%
Other loan (not family loan)	
None	95.8%
$1-$499	2.1%
$500-$999	0.7%
$1,000-$1,999	0.6%
$2,000-$4,000	0.6%
Over $4,000	0.3%
Savings from summer job	
None	57.6%
$1-$499	16.4%
$500-$999	12.1%
$1,000-$1,999	9.1%
$2,000-$4,000	4.0%
Over $4,000	0.8%
Other savings	
None	73.9%
$1-$499	15.9%
$500-$999	4.3%
$1,000-$1,999	3.1%
$2,000-$4,000	1.3%
Over $4,000	1.4%
Food stamps	
None	98.1%
$1-$499	0.7%
$500-$999	0.2%
$1,000-$1,999	0.8%
$2,000-$4,000	0.1%
Over $4,000	0.1%
Other public support	
None	99.0%
$1-$499	0.2%
$500-$999	0.2%
$1,000-$1,999	0.2%
$2,000-$4,000	0.3%
Over $4,000	0.1%
Spouse's earnings	
None	83.8%
$1-$499	6.6%
$500-$999	2.6%
$1,000-$1,999	2.4%
$2,000-$4,000	1.6%
Over $4,000	3.0%
Veteran's benefits	
None	95.3%
$1-$499	0.7%
$500-$999	1.3%
$1,000-$1,999	0.7%
$2,000-$4,000	1.7%
Over $4,000	0.3%
All other sources	
None	88.5%
$1-$499	6.0%
$500-$999	1.7%
$1,000-$1,999	1.2%
$2,000-$4,000	0.7%
Over $4,000	1.8%
Funds borrowed for education since entering college (except loans from friends and family):	
None	62.6%
Less than $1,000	7.5%
$1,000-$1,999	5.5%
$2,000-$2,999	7.7%
$3,000-$4,999	6.3%
$5,000-$6,999	4.8%
$7,000-$8,999	3.0%
$9,000-$10,999	1.7%
$11,000-$12,999	0.4%
$13,000-$14,999	0.2%
$15,000 or more	0.2%
Father's occupation:	
Armed forces	3.0%
Business executive, manager	15.9%
College or university teaching, research, administration	3.6%
Executive, administrative (misc.)	6.0%
Homemaker	0.8%
Owner, large business	2.8%
Owner, small business	14.7%
Professional job (misc.)	15.4%
Schoolteaching, administration	3.0%
Skilled wage worker	16.9%
Semi-skilled or unskilled wage worker, farm laborer	7.7%
Technical, semi-professional	6.3%
White-collar (misc.): clerical, sales	4.0%
Mother's occupation:	
Armed forces	—
Business executive, manager	1.6%
College or university teaching, research, administration	1.6%
Executive, administrative (misc.)	4.0%
Homemaker	42.1%
Owner, large business	0.3%
Owner, small business	3.8%
Professional job (misc.)	9.3%
Schoolteaching, administration	7.6%
Semi-skilled or unskilled wage worker, farm laborer	5.3%
Skilled wage worker	6.8%
Technical, semi-professional	3.6%
White-collar (misc.): clerical, sales	13.9%
Spouse's occupation:	
Armed forces	1.3%
Business executive, manager	2.5%
College or university teaching, research, administration	0.6%
Executive, administrative (misc.)	2.3%
Homemaker	2.0%
Owner, large business	0.7%
Owner, small business	2.4%
Professional job (misc.)	5.2%
Schoolteaching, administration	1.1%
Semi-skilled or unskilled wage worker, farm laborer	2.4%
Skilled wage worker	4.0%
Technical, semi-professional	2.7%
White-collar (misc.): clerical, sales	2.8%
Father's education:	
Eighth grade or less	12.4%
Some high school	8.9%
Completed high school	22.8%
Some college	18.2%
Graduated from college	17.7%
Attended graduate or professional school	7.9%
Attained advanced degree	12.0%
Mother's education:	
Eighth grade or less	8.8%
Some high school	9.4%
Completed high school	36.1%
Some college	20.2%
Graduated from college	15.1%
Attended graduate or professional school	5.7%
Attained advanced degree	4.7%
Spouse's education:	
Eighth grade or less	1.4%
Some high school	1.2%
Completed high school	5.4%
Some college	11.7%
Graduated from college	5.6%
Attended graduate or professional school	3.4%
Attained advanced degree	1.8%
Have sought advice from college's counseling service or dean's office on:	
Vocational matters	29.2%
Academic matters	68.9%
Financial-aid matters	36.9%
Personal matters	18.1%
The advice was highly adequate or adequate on:	
Vocational matters	32.2%
Academic matters	61.7%
Financial-aid matters	32.7%
Personal matters	21.6%
Am most comfortable in discussing problems with:	
Mother	16.2%
Father	4.4%
Brother or sister	8.6%
Spouse	19.5%
Clergyman	1.0%
Roommate	4.5%
Faculty member	0.8%
Friend	44.9%
There are professors at my college:	
Whom I can turn to for personal advice	34.2%
Who take a special interest in my academic progress	59.5%
Who have had a great influence on my academic career	40.2%
Academic experiences have included:	
Some courses for college credit in high school	10.9%
A term of study abroad (or plans for that)	8.8%
Courses at another institution while at current institution	9.3%
Repeat of one or more courses	31.6%
Plans to transfer to another college before receiving bachelor's degree	28.7%
Attendance in summer for degree credit	50.5%
Extra courses toward early graduation	14.5%
Kind of high school from which graduated:	
Public	84.9%
Parochial	8.5%
Other private	6.6%
Overall high-school grade:	
A or A+	14.4%
A–	15.9%
B+	23.5%
B	18.2%
B–	8.4%
C+	10.3%
C	6.4%
C– or less	2.9%
High-school education provided:	
A good foundation in mathematics, science	78.5%
Opportunities to write reports and essays that teachers critiqued carefully	73.1%
Opportunities for community service	45.6%
Instruction in computer use	29.2%
Solid training in English basics	83.2%
Foreign-language study	86.1%
Proportion of high-school classmates belonging to an ethnic minority:	
Less than one-fourth	66.8%
One fourth to one-half	19.5%
One-half to three-fourths	7.5%
More than three-fourths	4.1%
Almost all	2.2%

— Indicates less than 0.1%

Students' Views on Social and Educational Issues

Attitudes

	All institutions					4-year					By enrollment			
	Men	Women	Total	Public	Private	Research	Other Ph.D	Comprehensive	Liberal-arts	2-year	Under 5,000	5,000-9,999	10,000-19,999	20,000 and over
Political views														
Left	2.0%	2.2%	2.1%	1.9%	3.3%	2.1%	3.1%	2.5%	2.2%	1.6%	1.9%	0.8%	3.3%	1.5%
Liberal	22.7%	23.2%	22.7%	22.9%	21.1%	24.3%	23.5%	23.0%	19.7%	22.0%	21.4%	24.8%	20.2%	24.4%
Middle of the road	34.7%	40.1%	37.6%	37.8%	36.2%	36.9%	35.9%	41.4%	36.0%	36.0%	39.1%	42.3%	40.5%	32.7%
Moderately conservative	32.6%	30.7%	32.0%	31.7%	34.4%	31.4%	32.0%	29.4%	36.3%	33.3%	31.9%	27.8%	29.8%	35.5%
Strongly conservative	8.0%	3.8%	5.7%	5.8%	5.1%	5.4%	5.5%	3.7%	5.8%	7.1%	5.7%	4.3%	6.1%	5.9%
Parents' political views:														
Left	0.8%	1.1%	0.9%	1.0%	0.9%	0.5%	1.0%	0.7%	1.0%	1.3%	1.0%	0.9%	1.6%	0.3%
Liberal	9.5%	10.0%	9.7%	9.6%	10.6%	9.9%	8.9%	10.3%	10.9%	9.2%	12.1%	12.7%	7.7%	9.4%
Middle of the road	28.9%	35.1%	32.5%	32.7%	30.8%	33.4%	31.3%	36.0%	28.4%	30.5%	30.4%	34.9%	32.9%	31.9%
Moderately conservative	46.7%	40.1%	42.7%	42.5%	44.3%	43.5%	43.5%	42.8%	42.6%	42.3%	42.2%	38.6%	43.2%	44.2%
Strongly conservative	14.2%	13.7%	14.2%	14.3%	13.4%	12.7%	15.2%	10.2%	17.1%	16.8%	14.4%	12.9%	14.6%	14.1%
Satisfied or very satisfied with:														
Present college	78.1%	79.5%	79.1%	78.8%	81.1%	83.1%	79.9%	75.6%	81.5%	79.4%	78.8%	77.8%	80.7%	78.4%
Teaching at present college	76.3%	77.8%	77.3%	76.8%	81.1%	68.1%	67.6%	70.9%	85.3%	85.8%	82.9%	71.3%	77.5%	77.2%
Undergraduates should control or have voting power on committees that decide:														
Faculty appointment, promotion	20.0%	23.4%	22.1%	21.6%	25.6%	22.5%	24.4%	27.4%	26.6%	17.0%	22.5%	24.4%	23.0%	20.1%
Undergraduate admissions policy	17.3%	21.0%	19.7%	20.1%	17.5%	17.9%	23.6%	21.1%	18.6%	19.4%	19.7%	20.2%	21.0%	18.5%
Bachelor's-degree requirements	16.3%	19.4%	18.3%	17.9%	20.4%	17.1%	22.5%	21.0%	19.9%	15.4%	18.9%	15.8%	19.8%	17.5%
Provision, content of courses	19.6%	26.3%	24.1%	23.9%	25.6%	23.6%	28.1%	27.6%	22.7%	21.1%	23.8%	24.5%	23.6%	24.6%
Residence-hall regulations	55.8%	53.0%	54.8%	53.7%	62.4%	67.6%	60.2%	59.7%	62.8%	43.7%	57.1%	53.0%	55.2%	54.3%
Student discipline	49.0%	45.4%	47.5%	46.9%	51.8%	54.6%	51.1%	47.7%	51.8%	43.0%	49.6%	45.8%	46.7%	48.0%
My college should require all undergraduates to take more courses in:														
English composition	48.5%	52.2%	50.9%	52.1%	42.5%	48.4%	43.5%	45.6%	44.9%	58.4%	46.2%	50.4%	49.7%	54.2%

	All institutions					4-year				2-year	By enrollment			
My college should require all undergraduates to take more courses in: Continued	Men	Women	Total	Public	Private	Research	Other Ph.D	Comprehensive	Liberal-arts		Under 5,000	5,000-9,999	10,000-19,999	20,000 and over
Literature	32.7%	30.8%	31.5%	32.8%	21.8%	28.2%	28.9%	25.2%	18.8%	39.7%	24.2%	31.0%	28.5%	37.4%
History	32.9%	25.5%	28.2%	29.1%	21.2%	27.0%	27.2%	23.2%	18.5%	33.6%	22.7%	29.8%	27.7%	30.1%
Science	43.1%	31.7%	36.1%	37.3%	27.6%	35.0%	34.9%	33.3%	28.3%	40.0%	32.9%	37.3%	36.5%	36.7%
Mathematics	52.6%	46.6%	48.9%	50.1%	40.3%	41.1%	44.2%	47.3%	44.1%	54.8%	48.2%	53.2%	51.3%	45.2%
Computers	71.1%	70.7%	70.5%	70.4%	71.2%	70.5%	76.2%	75.7%	70.9%	65.4%	66.4%	72.8%	74.1%	67.8%
Foreign languages	34.8%	35.5%	35.1%	35.8%	30.0%	34.2%	34.1%	34.6%	28.1%	37.0%	31.1%	39.0%	39.3%	31.2%
The arts	26.6%	27.6%	26.9%	27.1%	25.8%	31.9%	26.1%	26.1%	25.7%	25.9%	28.3%	29.2%	25.7%	26.7%
Objectives considered essential at college:														
Detailed grasp of a special field	71.7%	74.7%	73.8%	74.8%	66.2%	65.9%	71.7%	73.9%	62.6%	78.4%	68.3%	73.8%	77.3%	72.7%
Well-rounded general education	54.0%	61.1%	58.7%	57.7%	65.8%	59.6%	54.9%	58.8%	70.5%	57.5%	66.6%	59.3%	58.4%	55.6%
Occupational training, skills	70.8%	78.1%	75.2%	76.5%	65.7%	69.4%	76.0%	76.3%	64.2%	78.0%	71.6%	79.0%	79.4%	71.4%
Learning to get along with people	55.0%	56.6%	56.1%	54.3%	69.8%	65.9%	63.2%	63.5%	72.0%	43.9%	64.6%	62.0%	56.8%	49.8%
Formulating life values, goals	55.2%	61.3%	59.1%	57.9%	67.6%	62.9%	63.2%	62.0%	71.3%	53.2%	68.0%	62.2%	60.9%	52.7%
Goals considered very important or fairly important:														
Career success	98.4%	95.8%	96.8%	96.6%	97.7%	98.4%	98.1%	98.0%	97.6%	95.1%	97.3%	99.1%	97.7%	94.9%
Happiness	99.6%	98.7%	99.1%	99.1%	99.7%	99.5%	99.6%	99.5%	99.5%	98.5%	98.7%	99.7%	99.8%	98.4%
A good marriage	94.1%	95.7%	95.1%	95.1%	95.4%	95.0%	93.8%	96.3%	94.9%	94.6%	94.0%	97.8%	96.2%	93.3%
Raising children	85.1%	86.2%	85.9%	85.6%	87.9%	87.0%	85.8%	87.7%	87.0%	84.2%	86.8%	88.0%	89.2%	81.8%
Financial success	94.0%	91.0%	92.2%	92.5%	90.0%	90.3%	92.4%	93.1%	87.7%	92.8%	91.7%	93.7%	93.2%	90.9%
A long life	88.4%	88.8%	88.8%	89.2%	84.7%	87.6%	86.1%	90.0%	86.6%	89.2%	88.4%	88.5%	89.6%	88.3%
Good health	99.5%	99.3%	99.4%	99.4%	99.3%	99.3%	99.7%	99.5%	99.0%	99.3%	98.7%	99.7%	99.2%	99.7%
New friendships	91.9%	93.6%	93.0%	92.6%	96.1%	95.6%	95.8%	95.2%	96.5%	89.6%	92.8%	94.3%	90.4%	94.9%
Religious, spiritual fulfillment	77.4%	81.9%	80.3%	80.0%	81.7%	77.2%	78.1%	80.5%	85.3%	81.0%	85.2%	76.8%	80.5%	79.5%
Intellectual development	96.0%	97.6%	97.0%	96.9%	98.1%	98.1%	98.3%	97.9%	98.8%	95.5%	97.5%	95.6%	97.7%	96.7%
Agree strongly or with reservations that:														
I trust the faculty to look out for students' interests	76.1%	76.2%	76.4%	75.5%	83.5%	71.0%	71.8%	74.8%	88.2%	79.0%	85.9%	75.6%	76.8%	72.7%
Part of my undergraduate education repeated work already covered in high school	35.7%	35.0%	35.1%	35.5%	32.1%	33.3%	41.8%	38.1%	33.3%	32.5%	32.8%	29.1%	38.9%	35.0%
If I could get a job now or the same job after finishing school, I'd take the job now	37.2%	43.5%	41.2%	42.6%	30.4%	28.3%	36.9%	37.0%	30.3%	50.9%	36.8%	38.4%	42.1%	43.1%
I'd drop out if college weren't helping my job chances	45.8%	37.5%	41.1%	42.1%	33.2%	34.8%	37.9%	42.7%	31.8%	44.3%	38.2%	37.0%	43.7%	41.3%
I'm bored in class	34.9%	38.9%	36.9%	37.4%	33.1%	42.0%	41.9%	40.7%	31.3%	32.2%	32.0%	34.3%	36.4%	40.3%
Most professors encourage active student discussion in class	79.8%	83.2%	82.0%	81.3%	87.6%	73.7%	79.0%	82.9%	90.6%	84.1%	90.3%	79.2%	84.3%	77.9%
Professors at my institution discuss their feelings about important issues	67.3%	70.6%	69.4%	68.8%	74.4%	62.2%	65.8%	70.1%	78.2%	71.3%	75.6%	66.3%	71.1%	66.8%
Professors encourage students to discuss their feelings about important issues	64.7%	72.4%	69.4%	68.7%	74.4%	59.1%	62.5%	67.3%	81.1%	74.6%	79.5%	77.8%	68.9%	66.5%
Most professors are well prepared for their classes	89.4%	88.9%	88.9%	88.3%	93.2%	90.5%	88.0%	90.0%	93.8%	87.0%	91.5%	84.9%	89.4%	88.9%
I'm proud of where I go school	72.7%	80.5%	77.8%	76.3%	88.8%	92.3%	84.8%	78.9%	88.0%	68.8%	84.3%	75.2%	74.5%	79.1%
Some cheating is necessary to get the grades I want	10.4%	8.2%	9.1%	9.0%	9.5%	10.1%	9.0%	9.3%	10.3%	8.5%	8.0%	9.3%	10.2%	8.5%
More students from minority groups should be admitted to my college	40.9%	46.8%	44.4%	44.1%	46.9%	40.3%	40.8%	43.1%	51.9%	46.7%	53.3%	46.2%	45.0%	39.9%
Most students at my college are basically religious	37.9%	37.5%	37.5%	34.7%	57.1%	41.0%	40.4%	39.6%	63.7%	30.3%	55.9%	32.1%	32.9%	36.1%
Few students regularly attend religious services	58.7%	48.2%	52.7%	54.2%	43.1%	53.2%	53.4%	54.1%	41.5%	53.1%	45.8%	54.3%	54.5%	53.4%
I'm more religious now than when I came to college	32.6%	34.9%	27.7%	26.6%	35.7%	28.5%	28.2%	39.7%	39.6%	24.4%	34.1%	24.9%	29.2%	25.1%
Colleges should provide a code of student conduct	56.5%	55.5%	56.0%	55.8%	56.8%	43.8%	46.6%	48.8%	59.6%	66.8%	59.7%	52.1%	55.5%	56.3%
Alcohol abuse is a serious problem on my campus	32.2%	33.1%	32.3%	32.1%	33.9%	48.1%	45.2%	38.4%	36.2%	18.7%	28.6%	36.6%	33.1%	31.3%
Sometimes I wish I had attended a more prestigious college	43.8%	36.9%	39.8%	40.6%	34.3%	28.1%	40.5%	45.1%	36.5%	40.8%	38.1%	41.6%	46.2%	34.2%
College is a good place to find out who you are	81.3%	80.0%	80.5%	79.8%	84.9%	87.5%	82.4%	83.4%	84.8%	75.0%	83.1%	80.3%	81.6%	78.4%
Undergraduate education would be improved if														
All courses were elective	16.3%	21.0%	18.9%	19.5%	14.6%	12.8%	14.5%	16.1%	16.5%	24.2%	19.9%	19.0%	15.9%	21.1%
Grades were abolished	16.2%	15.8%	16.0%	15.6%	19.2%	20.8%	19.5%	19.6%	18.1%	10.9%	18.0%	12.8%	18.9%	13.9%
Students were required to spend a year in community service	31.7%	28.6%	29.7%	29.7%	29.2%	25.6%	26.6%	29.6%	30.4%	31.8%	28.3%	32.8%	35.3%	23.7%
There were less emphasis on specialized training and more on broad liberal education	31.6%	28.8%	29.6%	28.5%	38.5%	31.4%	29.4%	28.0%	44.7%	28.2%	37.7%	28.2%	23.9%	32.2%
General-education courses required by my college														
Add to my understanding and enjoyment of other courses	76.6%	76.1%	76.5%	76.5%	77.0%	74.3%	71.2%	72.6%	79.1%	80.7%	77.4%	77.7%	78.3%	74.1%
Are irrelevant to the subjects that interest me most	38.1%	40.1%	39.2%	39.8%	35.4%	34.6%	41.0%	39.2%	32.7%	41.3%	37.6%	33.8%	36.7%	44.2%
Don't help prepare people for jobs	35.0%	30.0%	31.6%	32.1%	28.3%	31.1%	32.6%	33.5%	27.3%	31.2%	30.4%	35.1%	27.4%	34.7%
Reflect faculty and department interests rather than broad student interests	39.8%	31.1%	34.2%	34.2%	34.5%	34.3%	35.1%	41.1%	31.1%	29.8%	34.1%	34.6%	32.7%	35.5%
Help prepare me for lifelong learning	74.1%	73.9%	74.2%	74.0%	75.6%	71.9%	69.5%	73.0%	80.0%	76.0%	78.4%	72.4%	77.7%	70.1%
Are rarely taught by the best faculty members	37.1%	40.5%	38.8%	39.8%	31.6%	47.0%	44.9%	39.0%	27.8%	35.8%	31.2%	38.7%	36.7%	43.8%
My college is much like high school	20.9%	29.4%	25.7%	26.3%	21.5%	9.2%	13.0%	17.5%	26.5%	40.0%	32.4%	22.7%	26.4%	23.8%
I feel under great pressure to get high grades	56.8%	54.5%	55.2%	54.6%	59.0%	71.3%	62.1%	62.8%	55.3%	42.8%	50.6%	55.6%	55.5%	55.9%
It's difficult both to get good grades and to really learn something	32.5%	30.5%	30.9%	31.0%	30.9%	40.5%	32.5%	31.1%	32.4%	26.9%	27.5%	26.1%	31.4%	23.8%
Many successful students at my college make it by "beating the system" rather than studying	42.5%	34.1%	37.1%	37.2%	36.8%	43.4%	42.5%	43.7%	36.4%	29.0%	36.8%	35.9%	37.9%	36.9%
I am often lonely	30.1%	27.6%	28.5%	28.4%	29.1%	30.3%	33.4%	32.2%	27.6%	24.5%	30.3%	28.7%	25.4%	30.4%
Most students are treated like numbers in a book	47.3%	39.9%	42.4%	45.1%	22.7%	62.3%	57.1%	45.0%	9.3%	34.8%	18.6%	37.1%	44.6%	52.0%
Raising a family is very important to me	77.2%	80.6%	79.2%	78.8%	82.2%	78.9%	79.6%	78.5%	83.3%	79.0%	80.5%	83.2%	79.2%	77.0%
I believe there is a God who judges people	78.9%	74.2%	76.3%	76.5%	74.0%	79.3%	71.8%	75.3%	75.2%	80.4%	76.2%	76.5%	76.7%	75.7%
Becoming very well off financially is very important to me	82.2%	74.4%	77.0%	77.4%	73.3%	75.8%	79.6%	77.7%	68.7%	77.4%	76.1%	77.9%	76.8%	77.0%
I don't expect to marry	13.8%	13.2%	13.4%	13.5%	12.6%	9.9%	13.8%	11.6%	14.9%	16.5%	16.2%	10.5%	13.4%	13.4%
I feel a sense of community at my institution	57.9%	63.4%	61.6%	60.0%	73.5%	62.6%	57.6%	57.2%	79.7%	62.8%	72.8%	64.2%	62.7%	55.2%
My college has a clear sense of educational mission	75.5%	77.2%	76.4%	75.5%	83.1%	74.5%	70.2%	72.4%	86.2%	79.8%	83.5%	75.6%	76.9%	73.6%
Faculty priorities at my institution are more important than student priorities	41.4%	31.5%	35.1%	35.5%	31.9%	47.8%	47.6%	42.5%	25.2%	24.1%	28.5%	38.3%	33.5%	37.8%
The typical undergraduate curriculum has suffered from faculty specialization	27.6%	20.7%	23.3%	24.1%	17.5%	27.5%	27.8%	23.9%	14.3%	21.6%	17.8%	23.4%	21.5%	27.1%
The federal government should provide grants so no one is kept from going to college by a lack of funds	72.1%	84.1%	79.5%	79.5%	80.0%	79.0%	69.4%	78.7%	80.0%	80.2%	81.7%	80.2%	82.4%	75.8%
College officials have a right to ban extremist speakers	28.2%	22.0%	25.0%	24.6%	27.4%	19.0%	25.1%	24.3%	27.8%	27.2%	30.2%	19.3%	25.0%	25.2%
College's chief benefit is that it increases earning power	51.0%	50.5%	50.9%	52.7%	37.3%	39.5%	43.4%	45.0%	35.5%	62.5%	44.0%	46.4%	49.9%	56.1%
Undergraduates who regularly use illegal drugs should be suspended or dismissed	53.3%	57.5%	55.9%	55.4%	59.8%	51.2%	51.9%	54.9%	61.6%	58.5%	62.8%	53.5%	58.1%	52.3%
A person can be an effective teacher without personal involvement with students	60.8%	56.6%	58.0%	58.3%	56.1%	57.8%	58.6%	54.9%	50.5%	60.9%	57.4%	57.4%	56.9%	59.6%
Teaching effectiveness, not publications, should be the primary criterion for faculty promotion	94.6%	94.0%	94.3%	94.3%	94.1%	93.9%	94.2%	95.7%	94.3%	93.5%	92.4%	91.6%	93.2%	97.1%
Faculty members should be free to present in class any idea that they consider relevant	87.5%	86.5%	86.9%	87.0%	85.4%	86.9%	85.9%	87.0%	86.0%	87.1%	88.0%	85.4%	85.2%	88.5%
Most undergraduates at my college are satisfied with their education	82.7%	79.0%	80.6%	80.4%	82.6%	80.8%	78.5%	76.8%	84.3%	83.2%	83.2%	78.1%	81.3%	80.2%
Much of what is taught at my college is irrelevant to the what is going on in the outside world	19.6%	20.1%	19.9%	19.6%	21.9%	20.5%	23.4%	23.3%	19.9%	16.6%	19.2%	21.1%	19.6%	20.0%

Continued on Following Page

Survey Data Qualify Students' 'Satisfaction' with College

Continued from Page 1

of 310 colleges and universities, both two-year and four-year.

Collectively the data depict a student body whose aspirations often seemed to be undercut by the campus environment itself, particularly at the kind of large public institutions that enroll the preponderance of students today.

Combined with the results of a companion Carnegie Foundation survey of 5,000 faculty members in which more than half the participants said it was a poor time for young people to begin academic careers (*The Chronicle*, December 18), the findings appear to provide strong support to those calling for substantial reform of higher education.

According to the data, the predominant view of faculty members was that neither their students' academic ability nor their institutions' standards were adequate.

2 'Tension Points'

To Ernest L. Boyer, president of the Carnegie Foundation, the surveys point to an enterprise faced with often conflicting expectations among its two principal constituent groups—students and teachers.

In a telephone interview from his office in Princeton, N. J., last week, Mr. Boyer focused on two "tension points" that he said were suggested by the data—a "considerable mismatch between college climates and student expectation" and, simultaneously, a discordance between "faculty expectations and student performance."

The first problem stems from the way colleges and universities go about selecting and enrolling their students, he said. With institutions increasingly anxious about maintaining their enrollments, they are tending to "push very hard on all their strengths [and] suggest that they can do all things for all students."

The result, Mr. Boyer continued, is an ineffective process in which students often have more say about which institution they will attend than college and university officials do, yet the choices are not necessarily based on the right considerations.

"The procedures tend to blur rather than clarify what is important here," the Carnegie Foundation's president said, and "a lot of students end up at places they know very little about." In some instances, he added, students discover that the college or university they picked is "not what they had in mind at all."

The second point of tension, which Mr. Boyer first raised a few months ago at a conference on academic reform, involves a tendency of faculty members to see themselves and their students in a scholarly context, while many students are ill prepared for true scholarship and are far more interested in other pursuits.

Indeed, consistent with a widely reported increase in student materialism in recent years, the Carnegie study found that more than half the undergraduates regarded increased earning power to be the chief benefit of a college education. Meanwhile, more than one-fourth of the students said their colleges were much like high school.

More than half also said they felt they were under great pressure to get high grades, yet nearly one-third agreed that it was difficult to get good grades and "really learn something" at the same time. A slightly greater proportion said many students at their institutions succeeded by "beating the system" rather than by studying.

More Watching than Reading

By their own reckoning, moreover, the students spent more time watching television than they spent on "leisure reading" or studying in the library.

Mr. Boyer said the finding that nearly 37 per cent of the undergraduates reported feeling bored in class offered a revealing clue to some of the tensions in academe.

On one hand, he noted, while many faculty members are frustrated by students' lack of preparation, institutions are inclined to respond by "leveling down" the education they provide. But along with poorly prepared students are many others—even in large and relatively non-selective institutions—who have the background and ability for much more rigorous academic work.

Those students, said Mr. Boyer, a former U.S. Commissioner of Education, find that the curriculum lacks the "creativity and intellectual excitement" that they expected—especially during the first two years, when institutions typically concentrate on general education.

Colleges need to "work as hard at keeping students as getting them there in the first place."

In a forthcoming book that will draw on the two Carnegie surveys, as well as on detailed case studies at 30 colleges and universities, Mr. Boyer plans to describe how some institutions have been responding to such problems.

He said those responses included devoting more time and effort to freshman orientation, providing extended periods of close academic counseling, and helping students better understand "what the college community is all about."

Colleges and universities need to "work as hard at keeping students as getting them there in the first place," Mr. Boyer said, noting that about half of all undergraduates leave before graduation.

He added that many institutions had not yet succeeded in accommodating the needs of a growing number of part-time students and commuting students. Some of the survey results showed how dramatically part-time students can differ from their more traditional counterparts, who typically live on campus and attend college full-time.

More than half of the part-time students had full-time jobs and an additional fourth of them worked part-time. They were generally older, more than half of them were married, and about one-third had children.

Such students seemed to have a more immediate and more practical perspective on why they were going to college than traditional students had, the survey indicated. They were more inclined to see their education serving financial goals, for example, and felt much less pressured to get high grades. They reported having higher average grades in college—but lower high-school grades—than traditional students had.

Some results of the Carnegie stu-

FACT-FILE—Continued

Undergraduates' Attitudes on Social and Educational Issues

Agree strongly or with reservations that: Continued	All institutions					4-year				2-year	By enrollment			
	Men	Women	Total	Public	Private	Research	Other Ph.D	Comprehensive	Liberal-arts		Under 5,000	5,000-9,999	10,000-19,999	20,000 and over
Most faculty members at my college are strongly interested in undergraduates' academic problems	56.1%	61.1%	59.4%	57.8%	74.5%	46.8%	54.4%	55.0%	81.7%	65.2%	75.9%	62.2%	55.9%	55.1%
My college's library is adequate for my needs	79.8%	82.8%	81.5%	83.1%	69.9%	88.6%	85.5%	83.1%	69.5%	78.6%	74.2%	77.5%	79.7%	87.7%
Administrators at my college do not seem to care about students	29.0%	26.0%	27.2%	27.6%	24.2%	36.8%	37.2%	33.6%	19.9%	18.3%	19.9%	27.9%	26.9%	30.0%
Students have little contact with administrators at my college	56.1%	54.2%	54.6%	56.0%	44.1%	65.0%	63.7%	60.4%	32.6%	47.7%	37.2%	59.5%	60.0%	54.5%
Realistically, an individual can do little to change society	42.8%	41.7%	41.8%	42.3%	38.5%	41.1%	39.3%	43.8%	36.1%	42.0%	37.7%	38.6%	45.7%	41.1%
A lot of scientific research would be better left undone because the results threaten the human race	19.7%	16.2%	17.4%	17.2%	18.9%	14.2%	14.2%	22.0%	23.3%	15.5%	24.6%	20.4%	17.1%	13.7%
The U.S. spends too much for defense and military purposes	50.6%	56.5%	53.8%	53.5%	56.7%	57.8%	55.2%	58.2%	54.6%	49.2%	53.0%	58.3%	57.3%	49.2%
Poverty could be eliminated within 10 years if it were given a high national priority	53.0%	58.6%	56.7%	57.2%	52.2%	49.4%	53.1%	56.5%	50.6%	60.9%	54.0%	56.9%	58.0%	56.3%
Private corporations are too concerned with profits and not enough with public responsibility	74.1%	76.7%	75.6%	76.2%	71.1%	72.0%	72.6%	77.1%	69.8%	77.3%	75.1%	76.2%	79.0%	72.5%
I'm very apprehensive about the country's future	57.6%	61.7%	60.0%	60.1%	59.4%	53.4%	57.0%	61.6%	60.6%	61.9%	60.3%	60.5%	64.1%	55.8%
Capital punishment should be abolished	18.2%	22.7%	21.4%	20.8%	25.5%	24.5%	18.9%	23.7%	27.0%	18.5%	24.6%	25.3%	21.6%	18.3%
Only volunteers should serve in the armed forces	49.3%	48.1%	48.2%	48.4%	47.2%	52.2%	47.0%	51.4%	45.5%	45.5%	46.0%	49.9%	45.0%	51.4%
You hear too much about minority rights these days and not enough about majority rights	59.3%	54.1%	56.4%	57.4%	49.4%	51.0%	53.7%	55.9%	52.4%	59.9%	55.7%	52.1%	56.8%	58.2%
I'd support stronger environmental legislation, even at the expense of economic growth	72.1%	73.7%	73.0%	72.9%	73.7%	76.0%	74.2%	76.2%	75.5%	69.3%	74.0%	70.0%	72.6%	74.1%
Women should get job preference over males if they have the same qualifications	32.3%	46.3%	40.8%	41.3%	36.8%	31.5%	35.0%	37.7%	42.1%	47.2%	43.6%	40.7%	39.0%	41.3%
The American political system is working well	59.9%	56.6%	57.9%	58.5%	54.5%	54.7%	53.6%	53.4%	56.2%	63.3%	52.7%	54.0%	55.2%	64.1%
Our society discriminates against nonconformists	50.5%	54.5%	52.4%	51.8%	56.8%	51.2%	54.0%	54.8%	57.8%	50.2%	58.3%	47.4%	52.7%	51.7%
Our leaders are doing all they can to prevent nuclear war	52.4%	51.0%	52.0%	52.0%	51.8%	52.1%	52.4%	51.9%	51.4%	52.1%	51.1%	47.9%	47.7%	57.7%
It's unfair to have children, given prospects for peace	18.0%	24.5%	21.7%	22.2%	17.4%	14.0%	16.4%	20.8%	21.6%	26.1%	25.1%	23.7%	22.3%	19.0%
A woman should have freedom of choice on abortion	71.4%	78.5%	75.3%	76.1%	69.9%	78.5%	79.6%	76.1%	65.1%	74.2%	71.5%	79.7%	76.7%	74.0%
Nuclear disarmament should be a high government priority	73.6%	77.9%	76.3%	76.3%	76.3%	76.3%	75.4%	76.8%	75.7%	76.2%	76.7%	77.8%	76.8%	75.3%
I expect nuclear war in my lifetime	34.6%	35.1%	34.7%	34.9%	33.2%	29.4%	35.1%	35.3%	33.0%	36.4%	35.4%	37.9%	39.0%	29.4%
Current unrest in Central America is caused by poverty and injustice, rather than external political intervention	59.2%	52.3%	55.5%	55.8%	53.4%	57.1%	53.2%	52.5%	54.6%	57.6%	56.3%	54.3%	50.0%	60.7%
Foreign-policy decisions should be based on a strong commitment to human rights	84.3%	86.6%	85.7%	85.5%	86.7%	86.5%	84.8%	88.5%	85.5%	83.6%	88.2%	85.9%	85.4%	84.6%
More effort should be made to improve U.S.-Soviet relations	93.2%	88.8%	90.5%	90.4%	90.9%	94.0%	91.3%	93.3%	89.0%	87.3%	90.3%	92.4%	91.6%	88.8%
It is impossible for U.S. political leaders to maintain integrity	37.5%	35.2%	36.1%	36.6%	32.1%	30.6%	34.7%	35.9%	35.0%	38.6%	38.6%	36.4%	41.7%	30.9%
I'm less religious now than when I entered college	24.5%	22.5%	23.1%	23.3%	21.6%	28.9%	26.0%	25.8%	18.5%	19.2%	19.1%	19.6%	21.8%	27.3%
U.S. foreign policy ignores Third World countries	34.0%	33.6%	33.5%	33.2%	35.5%	31.2%	34.9%	35.6%	34.6%	32.5%	36.5%	32.3%	36.0%	30.5%
Older U.S. citizens don't have the services they need	59.4%	70.0%	65.6%	65.7%	65.6%	65.5%	63.3%	68.2%	65.1%	64.6%	65.2%	68.5%	67.9%	62.6%
College students should concentrate on academic work rather than political activities	63.1%	54.9%	58.5%	59.3%	52.8%	48.8%	52.4%	52.8%	58.2%	67.0%	59.4%	51.7%	61.1%	58.6%
Handgun sales and ownership should be legally controlled	61.3%	77.3%	71.0%	70.5%	75.2%	73.0%	71.5%	71.7%	72.7%	69.6%	68.2%	74.2%	68.6%	73.2%
Pornographic materials should be legally available to adults	59.3%	40.8%	51.9%	51.8%	53.1%	61.3%	61.7%	55.9%	46.6%	54.4%	54.4%	61.3%	51.7%	47.4%
The minimum drinking age should be 21 in all states	64.1%	66.5%	65.7%	66.5%	59.5%	51.0%	57.8%	63.5%	64.1%	66.9%	66.9%	65.4%	69.2%	62.2%
If people can't find jobs, it's their own fault	39.9%	34.4%	36.3%	36.4%	34.9%	34.5%	37.5%	33.6%	39.4%	35.3%	35.3%	30.5%	38.7%	36.7%

Note: Survey results are based on a two-stage stratified random sample of 5,000 undergraduates at 310 two-year and non-specialized four-year colleges and universities in the spring of 1984. Sections may not add to 100 per cent because of weighting, rounding, multiple responses, or exclusion of "no response" or other miscellaneous categories. Results have not been adjusted for apparent inconsistencies in some responses.

SOURCE OF DATA: CARNEGIE SURVEY OF UNDERGRADUATES. COPYRIGHT © 1986, THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING. REPRODUCED WITH PERMISSION OF THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING

dent survey appear to parallel findings by the Cooperative Institutional Research Program of the University of California at Los Angeles, which makes annual surveys of entering freshmen with the American Council on Education and conducts follow-up studies as they move through college and beyond.

"Superficially it looks like students are very satisfied with their college experience," said Alexander W. Astin, director of the studies at U.C.L.A. "On the other hand, you have a quarter of the students who say they are not satisfied, and considering the size of the investment on the part of the students and the government, this is a very large group not to feel good about their college experience."

Mr. Astin, whose surveys of freshmen exclude part-timers and former enrollees, said students seemed to be most satisfied with instruction and least satisfied with the "individualized kind of services that colleges are supposed to offer—like advising, personal counseling, health services, and employment placement."

Regarding students' relationships with faculty members, which have been found to be "the No. 1 key to a successful undergraduate experience," Mr. Astin reported finding "a very mixed picture."

Students are more dissatisfied with those relationships, if they exist at all, at large research universities than at small residential colleges, Mr. Astin said.

Apprehensive About Future

On other matters, the Carnegie Foundation's survey of students included these findings:

► Three-fifths of the respondents were "very apprehensive" about the future of the United States and nearly 35 per cent expected a nuclear war in their lifetime. About 22 per cent agreed that it was "probably unfair to bring children into the world considering current prospects for peace."

► About 42 per cent said that, realistically, an individual could do little to change society.

► About 19 per cent were largely indifferent to religion and an additional 3 per cent said they were opposed to it. About 28 per cent said they had become more religious since entering college and 23 per cent said they had become less religious.

► About 91 per cent favored more effort to improve U.S.-Soviet relations, and about 76 per cent wanted the federal government to give nuclear disarmament high priority.

► Three-fourths favored letting women choose whether to have an abortion, nearly two-thirds said older citizens in this country generally do not get the basic services they need, and 73 per cent would support stronger legislation to protect the environment, "even at the expense of economic growth."

► About 56 per cent agreed with the statement, "These days you hear too much about the rights of minorities and not enough about the rights of the majority."

Mr. Boyer's book, *College: The Undergraduate Experience in America*, is scheduled to be published next fall by Harper & Row. He said the Carnegie Foundation also hoped to produce at least two technical reports relating to its surveys, including material stemming from interviews with academic deans about general education and with college admissions officers.

A spokesman added that special reports on issues raised by the surveys, such as the transition from high school to college, were likely as well.

Schools' Role Called 'Crucial' in Steering Students to College

WASHINGTON

Unless their guidance counselors make them aware of the advantages of higher education, students in junior high school and the first years of high school may avoid the kind of academically challenging courses that would enable them to go on to college, a preliminary report by a College Board commission on pre-college guidance and counseling suggests.

"Student expectations regarding college are not necessarily reflected in the curriculum they enter in ninth grade," the report says. "By their senior year, only about half of the students reported being on a path that was congruent with their own college expectations."

The report also says that "economic pressures" and "dramatic changes in both the structure and the status of the family" are leaving students in need of "surrogate parents" to answer questions about their futures.

Those interviewed by the commission's members, while not discounting parents' influence on students' college plans, said that "schools play a major and perhaps increasingly important role in helping students assess and believe in their own potential," the report notes.

The commission was also told "that counseling for early adolescents should include specific information about college and financial-aid opportunities" because students, in making "crucial" course choices, need to understand "that college is a real possibility for them, financially as well as academically."

Howe Chairs Commission

The commission, now halfway through a two-year investigation, has been asked to suggest "ways in which the quality of pre-college guidance and counseling can be improved, and its availability increased." The commission's chairman is Harold Howe, II, a senior lecturer at Harvard University's Graduate School of Education. From 1965 to 1968, Mr. Howe was U.S. Commissioner of Education.

At a press briefing here last week, Mr. Howe said that, despite the changes in the status of the family, students interviewed by the commission continued to list their parents and siblings as "their most important advisers in matters relating to career and college planning.

"This raises in our minds," he continued, "a serious question about the needs of students with college potential whose families have not attended or are not inclined toward college." Students whose parents did not complete high school, he noted, "account for only 8 per cent of students defined as college bound."

Copies of the commission's preliminary report, "Keeping the Options Open," are available free from the College Board, 45 Columbus Avenue, New York 10023-6917.

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